

THE ROLE OF THE SOCIAL SUPPORT OFFERED BY TRADE UNIONS AS A  
MODERATOR OF THE STRESS-STRAIN RELATIONSHIP

DEBORAH ANNE HOWSE

A Dissertation submitted to the Faculty of Arts,  
University of the Witwatersrand, Johannesburg,  
in partial fulfilment of the requirements for  
the degree of Master of Arts.

---

Johannesburg, 1987.

## ABSTRACT

The present dissertation consists of two studies. The first study involves the development of a scale designed to measure social support offered by trade unions, and the second study, to assess the role of trade union social support as a moderator of the industrial relations stress-strain relationship.

Although trade unions are well placed to offer social support to its members no study has been carried out specifically to evaluate union social support. Therefore the aim of the present dissertation is to assess the moderating role of trade union social support. As yet no scale has been developed which measures trade union social support. Thus Study 1 details the development of a Trade Union Social Support (TUSS) scale. In developing the scale it was assessed for reliability and validity. Reliability results indicate good internal consistency scores ( $\alpha = 0.91$  and  $\alpha$  split-half = 0.88). Two types of validity were established; concurrent and construct validity. Concurrent validity was established by correlating the TUSS scale with three other conceptually related measures; trade union instrumentality, trade union commitment and social support from friends. Results show that the related variables all correlate significantly and in the predicted direction with the developed scale. Construct validity was established by using known-group differences and a factor analysis. Results indicate that the developed scale does differentiate between groups, namely race and education. Factor analysis results confirm the existence of a unidimensional scale of social support.

In Study 2 the moderator role of union support was assessed. The empirical model used included three independent variables (i.e., industrial relations stress, role ambiguity and role conflict). Four dimensions were identified as dependent variables (i.e., job satisfaction, life satisfaction, psychological well-being and propensity to leave the organisation), and the



two moderator variables were trade union social support and hardiness. The moderating effect was tested using moderated multiple regressions. Results indicate that industrial relations stress and trade union social support consistently act as a main effect on the stress-strain relationship. The interaction effect of trade union social support with role ambiguity and industrial relations stress yielded significant moderator effects on the stress-strain relationship with dependent variable job satisfaction.

The above results indicate that the trade union is a viable source of social support to certain members, which can act as both a main effect and moderating effect on the stress-strain relationship. The implication of this for trade union members is that they will benefit from enhanced levels of social support if support has largely main effects. However, if social support has primarily buffering effects, it will be of significant value to people experiencing moderate to high levels of stress. Lastly, limitations and future research strategies of the present study are discussed.

## DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Arts, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Deborah Howse

DEBORAH ANNE HOWSE

22 day of Jan, 1987.



## ACKNOWLEDGEMENTS

I would like to express my gratitude to:

Dr Stephen Bluen, my supervisor, for his guidance and assistance in the preparation of this study. His invaluable support surpassed the requirements of his ascribed role.

Mr Desmond East, General Secretary of the Motor Industry Combined Workers Union, for his support with access to the union, and his professional advice whenever requested.

Mr E. Myburgh, Mr G. Abrahams and Mr I. Schroeder for their unselfish assistance and interest in distributing and collecting of my questionnaires to the trade union members.

Mr George McFie, my husband, whose understanding and encouragement was a constant source of social support.

The Human Sciences Research Council and the University of the Witwatersrand for their financial assistance, which was greatly appreciated. Opinions and conclusions reached are those of the author and are not to be regarded as a reflection of the Human Sciences Research Council or the University of the Witwatersrand.

## TABLE OF CONTENTS

CHAPTER 1	1
STRESS THEORY	1
Introduction	1
Stress Theory	2
CHAPTER 2	7
SOCIAL SUPPORT	7
Introduction	7
Definitions of Social Support	7
Differences in Main, Moderating and Buffering effects of social support	9
Sources of Social Support	13
CHAPTER 3	16
TRADE UNIONS AS A SOURCE OF SOCIAL SUPPORT	16
Trade Union Objectives	16
CHAPTER 4	36
STUDY 1 DEVELOPMENT OF THE TRADE UNION SOCIAL SUPPORT SCALE	36
Measuring of Social Support	36
METHOD	42
Subjects	42
Procedure	44
Measuring Instruments	44
Statistical Analysis	46
Item Analysis	46
Reliability	47
Validity	48
RESULTS	49
Item Analysis	50
Reliability	55
Validity	55
DISCUSSION	58
CHAPTER 5	61
STUDY 2 TRADE UNION SOCIAL SUPPORT AS A MODERATOR OF THE STRESS-STRAIN RELATIONSHIP	61
Independent Variables: Stressors	62
Moderators	65
Dependent Variables: Strains	70
Aim of Study	74
METHOD	75
Subjects	75
Procedure	75
Measuring Instruments	75
Statistical Analysis	84
Moderated Multiple Regression	84
RESULTS	93



Reliability Test . . . . .	93
Multicollinearity Test . . . . .	94
Linearity Tests . . . . .	96
Hierarchical Regressions Involving Non-Linear Variables . . . . .	98
Moderated Multiple Regressions . . . . .	99
Regression Analyses Involving Dependent Variable Psychological Well-Being . . . . .	100
Regression Analyses involving Dependent Variable Propensity to Leave the Organisation . . . . .	104
Regression analysis involving Dependent Variable Life Satisfaction . . . . .	107
Regression analysis involving dependent variable Job Satisfaction . . . . .	110
DISCUSSION . . . . .	115
Discussion of Results . . . . .	115
Limitations of the study . . . . .	127
Theoretical and Practical Implications of the Study . . . . .	129
Future Research Strategy . . . . .	131
SUMMARY AND CONCLUSION . . . . .	132
REFERENCES . . . . .	135
APPENDIX . . . . .	151
Appendix of covering letter and questionnaires given to subjects. . . . .	151

## CHAPTER 1

### STRESS THEORY

#### Introduction

The present dissertation consists of two studies. Study 1 involves the development of an instrument designed to assess social support offered by trade unions. Many of the studies that have measured social support measured support from specific sources (e.g., friends, family, co-workers and supervisors). To assess trade union social support a scale needs to be developed that measures social support from a variety of trade union sources (e.g., shop stewards, union officials and co-workers). Thus, Study 1 attempts to develop an instrument that will evaluate social support offered by trade unions. Study 2 involves the use of the developed Trade Union Social Support scale to evaluate whether trade union social support does buffer and/or moderate the industrial relations stress-strain relationship.

More specifically, in Chapter 1 a brief outline of stress theory will be provided as a framework for examining social support. In the second chapter the definitions and different sources of social support will be discussed. In the third chapter one specific type of social support is reviewed, namely, trade union social support. It will be argued that, on the basis of the literature, trade unions can be seen as an effective source of social support. Chapter 4 will involve the development of a reliable and valid trade union social support scale. In Chapter 5 the developed trade union social support scale will be used to assess whether trade union social support does moderate the industrial relations stress-strain relationship. Finally, in the



discussion, limitations and practical implications of the dissertation will be discussed.

Before discussing social support, the stress-strain concept needs to be examined. The relationship between stress and strain is typically low (i.e.,  $r < 0.3$ ) (Sarason, Johnson & Siegel, 1978). However, researchers have found that factors such as social support (House, 1981), Type A behaviour (Howard, Cunningham & Rechnittzer, 1986), and hardiness (Kobasa, 1979) moderate this relationship. The focus of this present dissertation is on one of the known moderators, namely social support). However, the stress-strain theory first needs to be discussed to provide a framework for examining social support.

### Stress Theory

The stress concept has been used to explain a variety of outcomes, usually negative (Chalmers, 1981). Substantial empirical evidence exists linking a variety of stressors to negative physiological, psychological and behavioural consequences (e.g., Beehr & Newman, 1978; Dohrenwend & Dohrenwend, 1974). The focus of the negative consequences of stress has been consistent with the growing concern about physical and mental illnesses and health care (House, 1981; La Rocco & Jones, 1978). Despite its popularity, the concept of stress is elusive as there is no single agreed definition in existence (McLean, 1979). One reason for the absence of a clear, universal definition is because stress has been examined within at least three disciplines; physiology, psychology and sociology (Chalmers, 1981; Cox, 1982).

The definition of stress is largely determined by the approach to the study thereof. There are three main approaches to the study of stress (Chalmers, 1981). One approach defines stress as a physiological response to environmental demands (e.g., Selye, 1956). Response-based definitions of

stress focus on the responses which are taken as evidence that an individual has been under some form of stress (Chalmers, 1981). Typical to this approach of stress is the work of Selye (1956), who suggests that stress be defined as the non-specific response of the body to any demand made upon it. From animal experimentation, Selye (1956) proposed that bodily stress reactions follow a three-stage General Adaptation Syndrome (GAS). Selye calls this process non-specific because the body shows the same effects regardless of the source of stress (Cox, 1982). However, evidence suggests that the idea of non-specificity has been overstated (Chalmers, 1981). For example, Mason (1971) has shown that some stressful physical stimuli do not produce the GAS syndrome (e.g., fasting, exercise and heat).

Selye's (1956) approach has been criticised as it neglects the role of psychological factors in stress (Cox, 1982). Cox and MacKay (1981) suggest that much of the physiological GAS response is not directly determined by the actual presence of the stressor agent, but by its psychological impact on the person. According to the response-based definition, all the symptoms of the stress reaction occur together (Chalmers, 1981). Doubt has been expressed whether this is possible, with regard to Selye (1956) GAS syndrome (McGrath, 1970).

Where the response-based approach regarded stress as a dependent variable, the stimulus-based approach views stress as an independent variable (Cox & MacKay, 1981). The stimulus-based approach defines stress as an environmental stimulus that acts on the individual and causes strain (e.g., Cox, 1982; McGrath, 1970). This approach to stress has been referred to as the 'engineering analogy' (Chalmers, 1981). The analogy from engineering can be made: Just as metals have for example, different properties such as elastic limits, so different individuals have different built-in resistances or breaking points (Cox & MacKay, 1981). Up to a point, stress can be tolerated



but thereafter permanent damage, either physiological or psychological results (Cox, 1982). Here individuals may vary in the amount of stress that they can tolerate (Cox & MacKay, 1981).

The first difficulty associated with the stimulus approach to stress is that there are often individual differences in response to the same stress situation (Chalmers, 1981; Cox, 1982), and statements made about stressful environments may by necessity have to rely on normative data. Second, this approach is seen to be too mechanistic, treating the individual as a passive recipient of stress (Cox & MacKay, 1981). Third, there is a problem identifying, with surety, what is stressful about particular real-life situations (Cox, 1982). For example, identifying stressful aspects of a person's job may not be so obvious.

The third approach, the person-environment interaction approach represents a synthesis of the stimulus and the response-based definitions of stress (Cox, 1982). As such, this approach is the most widely accepted concept of stress (Chalmers, 1981), and will be used as a basis in the present study. In the interaction approach, stress is seen as the unique interaction between stressful environmental stimuli and the resultant consequences which are moderated by intervening psychological processes (Cox, 1982; McGrath, 1976). Several person-environment interaction models have been developed. For example, McGrath (1970, p. 135) defines the person-environment interaction of stress "when an environment situation is perceived as presenting a demand which threatens to exceed the person's capabilities and resources for meeting it". However, Lazarus (1976) states that a person's perception of a demand and his/her assessment of resources may differ from person to person and can be situation specific.

Although the definition stated above belies the extent of disagreement among writers in the stress field (Wells, 1982), there is near consensus in the recognition that stress is essentially a subjective phenomenon (Kasl, 1978). Whether a particular situation is stressful depends ultimately on how it is experienced and appraised by the person involved (Wells, 1982).

For example, French, Rogers and Cobb (1975) suggest that the problem of stress be seen as a question of 'fit' between the person and his/her environment. Normally, this fit can be characterised as an equilibrium in which environmental demands do not exceed the person's abilities and the person's needs do not exceed environmental supplies. If people believe that their coping resources are no longer effective, then they reappraise a challenging demand as a threat. Lazarus (1976) distinguishes two types of appraisal, primary and secondary appraisal. Primary appraisal focuses on the demand characteristics of a situation. Secondary appraisal refers to ongoing evaluations of alternate coping strategies to deal with the demand (Chalmers, 1981). Sometimes, however, the environment poses problems for the individual and his/her standard repertoire of responses is inadequate. If coping and management strategies are unsuccessful it can lead to consequences of not adapting which are serious for the individual (Cox & Mackay, 1981).

If stressful events do exceed a person's capabilities and resources of coping, he/she will experience strain (Chalmers, 1981). Strain manifests itself in a variety of forms. These include psychosomatic complaints, anxiety, depression and cardiovascular distress (Billings & Moos, 1982; House, 1981; Wells, 1982). Jenkins (1971) has suggested that continued environmental stressors can lead to the reaction of anxiety, changes in cardiovascular function and, in time, to coronary heart disease or mental ill health.



Thus stress can cause strain, but this stress-strain relationship can be moderated by factors such as social support. To test the hypothesis that social support does moderate the stress-strain relationship, there is a need to translate this into a model. In this dissertation the stressors (i.e., independent variables) will include organisational stressors, or more specifically, industrial relations events, role ambiguity and role conflict. The resultant strains (i.e., dependent variables) will include such factors as life satisfaction, and psychological well-being. The moderator variable of this research will be that of social support, or more specifically, trade union social support. Before testing this model, the theory behind social support needs to be examined. Thus the concept of social support will be discussed in Chapter 2. In Chapter 3 it will be argued that trade union social support will be effective in moderating the industrial relations stress-strain relationship.

## CHAPTER 2

### SOCIAL SUPPORT

#### Introduction

This chapter focuses on social support as a potential moderator of the stress-strain relationship. In dealing with this concept, contemporary definitions and types of social support will be discussed first. The differences between main, moderating and buffering effects of social support on the stress-strain relationship will also be examined as it is the moderating effect of social support that will be tested in Study 2. The different sources of social support will be looked at, for example, non-work and work related sources and empirical evidence shown. Finally, it will be argued that the trade union is ideally placed to offer social support to its members as it offers support at the workplace.

#### Definitions of Social Support

The concept of social support has been conceptualised differently (House, 1981). Cassel (1976), for example, provides no explicit definition of social support, whereas Lin, Simeone, Ensel and Kuo (1979) define social support as support which is social! House (1981) says that such imprecision in the conceptions of support is mirrored on operational measures that are a mixture of anything that might protect people against stress and disease, including ego strength and social class (Nuckolls, Cassel & Kaplan, 1972).

Some authors have generated more explicit and appropriate definitions of social support (Wells, 1978). Cobb (1976, p. 300) defines social support as



information leading the subject to believe that he/she is first, cared for and loved, second is esteemed and valued, and third belongs to a network of communication and mutual obligation. Later Cobb (1979) refers to these above three aspects of social support, which are equally weighted in importance, as (1) emotional support, (2) esteem support, and (3) network support.

Kahn and Antonucci (1980) define three categories of social support which correspond closely to Cobb's definition. The main difference between the authors is in their terminology used. Kahn and Antonucci (1980) define social support as interpersonal transactions that include one or more of the following key elements: affect, affirmation and aid. Kahn and Antonucci (1980) define affect as expressions of liking, admiration or love. Affirmation refers to expressions of agreement or acknowledgement of the appropriateness or rightness of some act or statement of another person (Kahn & Antonucci 1980). Aid refers to transactions in which direct aid or assistance is given, including things, money, information or time, which Cobb chooses to label as 'active' support (Cobb, 1976).

House (1981), who built upon existing definitions, distinguishes four types of social support, namely, emotional, appraisal support, informational, and instrumental support. Emotional support refers to the provision of trust, empathy and love. Appraisal support is the evaluative feedback one might give or receive. Informational support includes the giving of advice or information which will help another individual. Instrumental support refers to behaviours or transactions in which direct aid or assistance is given and this may include loaning money. Tardy (1985), in a review of articles, finds House's (1981) typology of social support as the most useful.

Regardless of how social support is conceptualised it would seem to have one basic element (Procidano & Heller, 1983). First, the perception that there

is a sufficient number of available others whom one can rely on in times of need. Some individuals may turn to only one person to obtain social support, while others may turn to a large number of available helpers (House, 1981).

Empirical findings reveal that social support may reduce strain (House, 1981), improve health (Beehr & Newman, 1978), and buffer the impact of job related stress on physical and mental health (Wells, 1982). Social support also contributes to the positive adjustment and personal development (Sarason, Lovin, Basham & Sarason, 1983). For example, Dean and Lin (1977) indicate that social support buffers the effects of stress on illness, including prenatal complications (Nuckolls et al., 1972), presenting complaints to general practitioners (Miller, Ingham & Davidson, 1976), and death amongst geriatric patients (Lowenthal & Haven, 1968). Syme (1974) in a nine-year follow up study, using mortality rates as the dependent variable, found that people who lacked social support were more than twice as likely to die than those with extensive contacts. Gore (1978) demonstrated that among individuals faced with the stress of unemployment, those with low social support evidenced significantly higher stress levels and more changes in measures of serum cholesterol, illness symptoms and affective response than the more highly supported group.

#### **Differences in Main, Moderating and Buffering effects of social support**

House (1981) suggests that social support can directly enhance health and well-being because it meets important human needs for security, social contact, approval and belonging. That is, positive effects of social support on health can offset or counterbalance the negative effects of stress. First, social support from people at work can directly reduce levels of occupational stress in a variety of ways, and prevent illness. For example, supportive supervisors and co-workers can minimise interpersonal pressures or tensions.



Second, the experience of support can satisfy work related motivations for affiliation, approval and accurate appraisal of the self and environment. This will generally leave workers more satisfied with themselves and their jobs (House, 1981) leading to greater job satisfaction and less likelihood of persons leaving the place of work (Procidano & Heller, 1983).

These above effects of social support may refer to main effects. Recent interest in social support has engendered a third type of effect, that is, the potential of social support to buffer and/or moderate the impact of occupational stress on health. Here social support has no direct effect on either stress or health, but rather modifies the relation between them (House, 1981). The concept of buffering is implicitly central in most of the major writings on social support (Wells, 1982), and some authors have gone so far as to suggest that buffering is virtually the only way in which support affects health (House, 1981). Caplan's definition of social support systems emphasises its role in improving "adaptive competence in dealing with short term crises and life transitions as well as long term challenges and stresses" (Caplan & Killilea, 1976, p. 41). The implication of this statement is that the deleterious impact of stress on health is mitigated (or even eliminated) as social support increases, and conversely that social support will have its strongest beneficial effect on health among people under stress and may have little or no effect for people not under stress. Kaplan, Cassel and Gore (1977, p. 49) makes this implication explicit in saying that social supports are likely to be protective only in the presence of stressful circumstances.

House (1981) explains the need to distinguish main versus buffering effects when considering how stress and social support may combine to affect health. Figure 1 illustrates three possible ways in which social support and stress may jointly affect health. Each graph in Figure 1 depicts the linear relationship between occupational stress and health for three different

levels of social support. Figure 1a illustrates a purely buffering effect. Here occupational stress has no effect on health if people have high social support, but the effects of stress on health become increasingly adverse as support decreases. In contrast Figure 1b illustrates where support has a main effect on health, but the slope of the relationship between stress and health is unaffected by levels of support, indicating no buffering. Regardless of stress level, rates of disease on poor health increase as social support decreases. Figure 1c shows the case where support has both a main effect on health and a buffering effect on the relationship of stress to health.



Figure 1a  
Graph of interaction effect only



Figure 1b  
Graph of main effect and buffering effect



Figure 1c  
Graph of main effect and buffering effect



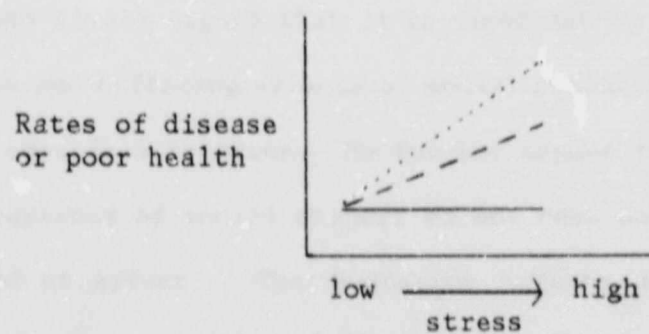


Figure 1a  
Graph of effects of buffering only

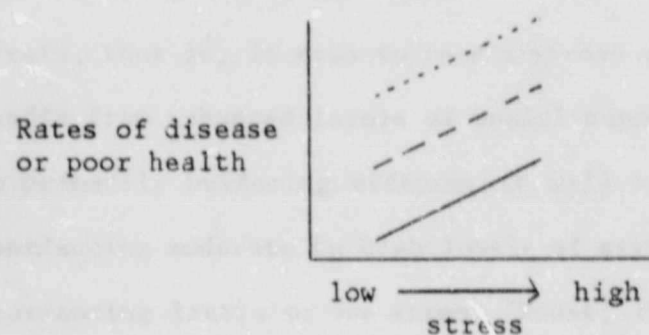


Figure 1b  
Graph of interaction effect only

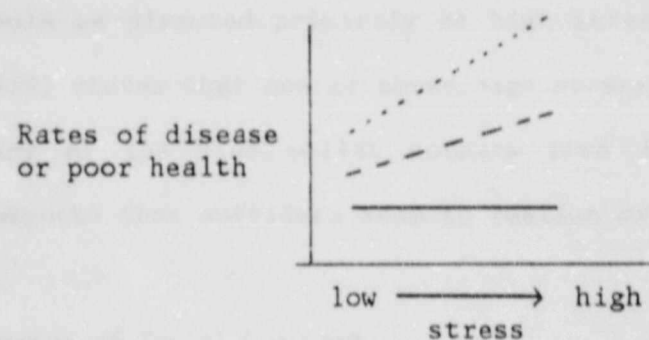


Figure 1c  
Graph of main effect and buffering effect

Key

- ..... low support
- medium support
- high support

Figure 1  
Graphs depicting buffering, interaction and the combination of main and buffering effect of social support on the stress-strain relationship  
(from House, 1981, p. 33)

**Author** Howse Deborah Anne

**Name of thesis** The Role Of The Social Support Offered By Trade Unions As A Moderator Of The Stress-strain Relationship.  
1987

***PUBLISHER:***

University of the Witwatersrand, Johannesburg

©2013

***LEGAL NOTICES:***

**Copyright Notice:** All materials on the University of the Witwatersrand, Johannesburg Library website are protected by South African copyright law and may not be distributed, transmitted, displayed, or otherwise published in any format, without the prior written permission of the copyright owner.

**Disclaimer and Terms of Use:** Provided that you maintain all copyright and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal and/or educational non-commercial use only.

The University of the Witwatersrand, Johannesburg, is not responsible for any errors or omissions and excludes any and all liability for any errors in or omissions from the information on the Library website.